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APPLICATION NO.	. FILING DATE FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/782,274	02/19/2004	Michael K. Lindsey	MKL-003	4235		
48490	7590 07/13/2006		EXAM	EXAMINER		
MICHAEL K. LINDSEY GAVRILOVICH, DODD & LINDSEY, LLP			RADA, ALEX P			
	ICH, DODD & LINDSE OWDOWN PL.	ART UNIT	PAPER NUMBER			
TUCSON, A	AZ 85749		3712			
			DATE MAILED: 07/13/2006			

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicatio	n No.	Applicant(s)				
Office Action Summary		10/782,27	4	LINDSEY ET AL.				
		Examiner		Art Unit				
		Alex P. Ra	da	3712				
Period fo	The MAILING DATE of this communication ap or Reply	pears on the	cover sheet with the c	orrespondence ad	ldress			
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLICHEVER IS LONGER, FROM THE MAILING Insions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. In period for reply is specified above, the maximum statutory period for to reply within the set or extended period for reply will, by statutely received by the Office later than three months after the mailined patent term adjustment. See 37 CFR 1.704(b).	DATE OF TH .136(a). In no ever d will apply and will te, cause the appli	S COMMUNICATION  nt, however, may a reply be time  expire SIX (6) MONTHS from the cation to become ABANDONEI	N. sely filed the mailing date of this of (35 U.S.C. § 133).				
Status								
1)	Responsive to communication(s) filed on 191	February 200	4. IDS.	,				
2a) <u> </u>	·	is action is no						
3) 🗌	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposit	on of Claims							
4)⊠	4)⊠ Claim(s) <u>1-21</u> is/are pending in the application.							
	4a) Of the above claim(s) <u>21</u> is/are withdrawn from consideration.							
5) 🗌								
6)⊠	☑ Claim(s) <u>1-20</u> is/are rejected.							
7)	Claim(s) is/are objected to.				•			
8)[	Claim(s) are subject to restriction and/	or election re	quirement.					
Applicat	on Papers							
9) 🗌	The specification is objected to by the Examin	ner.	,					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.								
•	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11)	The oath or declaration is objected to by the E	Examiner. No	te the attached Office	Action or form P	TO-152.			
Priority (	under 35 U.S.C. § 119	•						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:								
	1. Certified copies of the priority documents have been received.							
	<ul> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>							
	application from the International Bure	•		ou iii tiiis ivationa	Clage			
*	See the attached detailed Office action for a lis	•	* **	ed.				
	•		· .					
Attachmen	t(s)							
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)								
	e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08	۵۱	Paper No(s)/Mail Da  5) Notice of Informal P	ate atent Application (PT	O-152)			
	mation disclosure Statement(s) (P10-1449 or P10/SB/08 or No(s)/Mail Date <u>2/19/04</u> .	6) Other:	manus speniority (	- · <del></del> /				

#### **DETAILED ACTION**

#### Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-20, drawn to an electronic die, classified in class 273, subclass 146.
  - Claim 21, drawn to process and manufacturing, classified in class 264, subclass
     272.13.

The inventions are distinct, each from the other because of the following reasons:

- 2. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case invention II can be made to make electronic memory cards.
- 3. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.
- 4. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
- 5. During a telephone conversation with Michael Lindsey on June 14, 2006 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-20. Affirmation of this election must be made by applicant in replying to this Office action. Claim 21 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

## Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998), *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993), *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985), *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982), *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970), and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-20 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-30 of U.S. Patent No. 7,017,905 in view of Brady (US 3,755,241). U.S. Patent No. 7,017,905 disclose all of the claimed limitation as disclosed therein except for potting material filling the inside of the outer shell.

Brady teaches a potting compound used within a casing to protect electronic component from being destroyed or damaged. By having potting material, one of ordinary skill in the art would provide a protective support for components inside of a casing that may be damage by vibration or shock. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to include potting material as taught by Brady to provide a protective support for components inside of a casing that may be damage by vibration or shock.

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# **Drawings**

8. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the elements of claims 4 and 16-17 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the limitation of, "potting material filling the outer shell" is confusing. The specification discloses the potting material filling the inside of the shell with the electronic components and not the outside. The examiner assumes that applicant intended to for the potting material to be inside the outer shell and will reject accordingly.

## Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 12. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Ikeda (US 5,694,045).
- 13. Ikeda discloses an outer shell defining the shame of the dice (Figure 25A), electronics located inside of the outer shell, wherein the transponders (4) to be the electronics located inside of the outer shell (figure 25A), and potting material filling the inside of the outer shell (figure 25B and col. 29, lines 51-59) as recited in claim 1.

#### Claim Rejections - 35 USC § 103

- 14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the

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subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 15. Claims 1-3, 5-6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larson (US 4,641,840) in view of Brady (US 3,755,241).
- 16. Larson discloses the following:

An outer shell defining the shape of the die (figure 1) and electronics (25) located inside the outer shell (figure 1) as recited in claim 1.

The electronics include one or more light emitters (figures 2, 3a-3b and col. 8, line 50 – col. 5, line6) as recited in claim 2.

At least one of the light emitters is located on the outer shell, wherein the numeric displays 19-24 to be at least one of the light emitter located on the outer shell (figure 1) as recited in claim 3.

The electronics include a circuit for activating one or more light emitters (figures 3a-3b) as recited in claim 5.

The electronics include a battery (within circuit board 25) as recited in claim 6.

The outer shell includes plural sides (figure 1), an opening on one of the sides (figure 1), and a lid (figure 1) mated to the opening for sealing shut the outer shell (figure 1) as recited in claim 9.

Larson does not expressly disclose the following:

Potting material filling inside the outer shell as recited in claim 1.

Brady teaches a potting compound used within a casing to protect electronic component from being destroyed or damaged. By having potting material, one of ordinary skill in the art would

provide a protective support for components inside of a casing that may be damaged by vibration or shock. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Larson to include potting material as taught by Brady to provide a protective support for components inside of a casing that may be damage by vibration or shock.

- 17. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Larson (US 4,641,840) in view of Brady (US 3,755,241) as applied to claim 2 above, and further in view of Skowronski et al (US 4,809,979).
- 18. Larson in view of Brady disclose the claimed invention as discussed above except for one or more light pipes for directing light from light sources to the exterior surface of he outer shell, wherein the numeric as recited in claim 4.

Skowronski et al teaches one or more light pipes for directing light from light sources to the exterior surface of he outer shell, wherein the numeric, wherein an integral lens portion (22) which projects inwardly for transmission of light from an aligned lamp unit to be one or more light pipes for directing light from light sources to the exterior surface of he outer shell, wherein the numeric (col. 6, lines 1-6) as recited in claim 4. By having one or more light pipes, one of ordinary skill in the art would provide a clear view of the lights being generated on the device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Larson to further include one or more light pipes for directing light from light sources to the exterior surface of he outer shell, wherein the numeric as taught by Skowronski et al to provide a clear view of the lights being generated on the device.

19. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larson (US 4,641,840) in view of Brady (US 3,755,241) as applied to claim 1 above, and further in view of Lam (US 6,394,903).

20. Larson in view of Brady disclose the claimed invention as discussed above except for the following:

> The electronics include: a circuit and a sound source for generating sound as recited in claim 7.

> The electronics include a switch selected from the group consisting of a spring switch, a gravity switch and a combination of the foregoing as recited in claim 8.

Lam teaches the following:

The electronics include: a circuit and a sound source for generating sound (col. 1, lines 28-31) as recited in claim 7.

The electronics include a switch selected from the group consisting of a spring switch, a gravity switch (figures 2-3) and a combination of the foregoing as recited in claim 8. By having a sound generator and a gravity switch, one of ordinary skill in the art would provide an audible indication of which side of the electronic toy die is up.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Larson to further include a circuit and a sound source for generating sound and a switch selected from the group consisting of a spring switch, a gravity switch and a combination of the foregoing as taught by Lam to provide an audible indication of which side of the electronic toy die is up.

Claims 10, 15-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over 21. Larson (US 4,641,840) in view of Solow et al. (US 6,588,748) and Brady (US 3,755,241).

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# 22. Larson discloses the following:

A cube-shaped box having an opening on one side (figure 1), a lid, mated to the opening (figure 1), for sealing the box shut (col. 3, lines 47-col. 4, line 4), a plurality of light emitters each having at least a portion thereof and the lid, wherein the LCD or LED to be a plurality of light emitters each having at least a portion thereof and the lid, a circuit located inside the box for causing the light emitters to flash (item 25 of figure 1 and 3a-3b), at least one battery (within circuit board 25), located inside the box, for powering the circuit and the light emitters as recited in claim 10.

The light emitters are light emitting diodes (LEDs), (col. 8, line 50 – col. 9, line 6 and figures 3a-3b) as recited in claim 15.

The circuit includes an LED flasher circuit connected to the LEDs (figures 2 and 3a-3b) as recited in claim 16.

The cube-shaped box is made of ABS plastic, polycarbonate plastic, metal, wood or any combination of the foregoing (abstract and figure 1) a recited in claim 18.

Larson does not expressly disclose the following:

A plurality of thru-holes on the remaining five sides, wherein the thru-holes are arranged in a pattern representing dots of a conventional six-sided die, the lid having at least one thru-hole, a plurality of light emitters each having at least a portion thereof placed in the thru-holes of the box and the lid, and potting material placed in the box as recited in claim 10.

The potting material fills the box to the extent that a user perceives the electronic die as being solid as recited in claim 11.

The potting material is selected from the group consisting of a plastic resin, sand, dry granules, plastic granules, and any combination of the foregoing as recited in claim 12.

Solow et al teaches the following:

A plurality of thru-holes on all sides of dies arranged in a pattern representing dots of a conventional six-sided die and a plurality of light emitters each having at least a portion thereof plate in the thru-holds of the box (col. 2, line 66 – col. 3, line 6) as recited in claim 10. By having a plurality of thru-holes representing dots of a conventional six-sided die with a plurality of light emitters, one of ordinary skill in the art would provide a distinct visual indication of each side of the die is facing up.

## Brady teaches the following:

A potting compound used within a casing to protect electronic component from being destroyed or damaged as recited in claim 10.

The potting material fills the box to the extent that a user perceives the electronic die as being solid, wherein the process in col. 1, lines 6-24 to be the potting material fills the box to the extent that a user perceives the electronic die as being solid as recited in claim 11.

The potting material is selected from the group consisting of a plastic resin, sand, dry granules, plastic granules, and any combination of the

foregoing, wherein the potting material Brady to similar to the potting material selected for the group as recited in claim 12.

By having potting material, one of ordinary skill in the art would provide a protective support for components inside of a casing that may be damaged by vibration or shock.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Larson to include a plurality of thru-holes on the remaining five sides, wherein the thru-holes are arranged in a pattern representing dots of a conventional six-sided die, the lid having at least one thru-hole, a plurality of light emitters each having at least a portion thereof placed in the thru-holes of the box and the lid, and potting material placed in the box, the potting material fills the box to the extent that a user perceives the electronic die as being solid and the potting material is selected from the group consisting of a plastic resin, sand, dry granules, plastic granules, and any combination of the foregoing as taught by Solow et al and Brady to provide a distinct visual indication of each side of the die is facing up and a protective support for components inside of a casing that may be damaged by vibration or shock.

- Claims 13-14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larson (US 4,641,840) in view of Solow et al. (US 6,588,748) and Brady (US 3,755,241) as applied to claim 10 above, and further in view of Lam (US 6,394,903).
- 24. Larson in view of Solow et al. and Brady disclose the claimed invention as discussed above except for the following:

The circuit includes a switch for activating the circuit as recited in claim 13.

The electronics include a switch selected from the group consisting of a spring switch, a gravity switch and a combination of the foregoing as recited in claim 14.

The electronics include: a circuit and a sound source for generating sound as recited in claim 20.

Lam teaches the following:

The circuit includes a switch for activating the circuit (figures 2-3) as recited in claim 13.

The electronics include a switch selected from the group consisting of a spring switch, a gravity switch (figures 2-3) and a combination of the foregoing as recited in claim 14.

The electronics include: a circuit and a sound source for generating sound (col. 1, lines 28-31) as recited in claim 20.

By having a gravity switch and a sound generator, one of ordinary skill in the art would provide an audible indication of which side of the electronic toy die is up.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Larson to further include a switch for activating the circuit, the switch selected from the group consisting of a spring switch, a gravity switch and a combination of the foregoing, and the electronics include: a circuit and a sound source for

generating sound as taught by Lam to provide an audible indication of which side of the electronic toy die is up.

- 25. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Larson (US 4,641,840) in view of Solow et al. (US 6,588,748) and Brady (US 3,755,241) as applied to claim 10 above, and further in view Skowronski et al (US 4,809,979).
- 26. Larson in view of Solow et al. and Brady disclose the claimed invention as discussed above except for the light emitters include at least one light pipe for directing light from a light source.

Skowronski et al teaches one or more light pipes for directing light from light sources to the exterior surface of he outer shell, wherein the numeric, wherein an integral lens portion (22) which projects inwardly for transmission of light from an aligned lamp unit to be one or more light pipes for directing light from light sources to the exterior surface of he outer shell, wherein the numeric (col. 6, lines 1-6). By having one or more light pipes, one of ordinary skill in the art would provide a clear view of the lights being generated on the device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Larson to further include the light emitters include at least one light pipe for directing light from a light source as taught by Skowronski et al to provide a clear view of the lights being generated on the device.

- 27. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Larson (US 4,641,840) in view of Solow et al. (US 6,588,748) and Brady (US 3,755,241) as applied to claim 10 above, and further in view Cooney (US Pub. 2005/0164778).
- 28. Larson in view of Solow et al. and Brady disclose the claimed invention as discussed above except for the cube-shaped box is plated on its exterior surface.

Cooney teaches a cube-shaped box being plated on its exterior surface (paragraph 0015). By having a coating on the exterior surface, one of ordinary skill in the art would provide different types of design indicia to the exterior sides of the dice.

Therefore, it would have been obvious to one of ordinary skill in the art to further include the cube-shaped being plated on its exterior surface as taught by Cooney to provide different types of design indicia to the exterior sides of the dice.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex P. Rada whose telephone number is 571-272-4452. The examiner can normally be reached on Monday - Friday, 08:00-16:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hotaling can be reached on 571-272-4437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

APR

I**QIÉN XI.** HOTALING, I PRIMARY EXAMINE